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--Willy Crane, Crane Home Energy Owner, GreenTown Joplin Volunteer of the Year

Photos by Tina Smith

## Willy Crane

## GreenTown Joplin Volunteer of the Year

By Lori Marble

reenTown Joplin recently recognized Willy Crane, owner of Crane Home Energy, as Volunteer of the Year. His business is devoted to making people's homes more energy efficient but Crane extends his devotion to helping Joplin residents above and beyond the work day.

"I don't consider myself too highly," said Crane. "I was surprised to get it (the award). I've helped by offering information, worked the Third Thursday booth answering questions about green building and energy efficiency."

In addition, Crane has penned articles on various green building topics, once again offering at no charge his expertise to local residents looking for green building direction.

"A lot of people have heard a little bit here or there but they're confused," said Crane. "A lot of the topics are bigger than they are used to dealing with."

GreenTown Joplin was created to assist the Joplin area in recovering from the 2011 tornado while incorporating sustainability practices into the rebuilding effort. The Joplin effort was launched by Greensburg GreenTown, Greensburg, Kansas, a nonprofit organization that was established following the 2007 tornado that struck that community. Both efforts look to create model green communities.

The mission of GreenTown Joplin is to "help craft a sustainable vision

for Joplin's future." In doing so, the group is encouraging sustainable building practices, launching demonstration projects, helping promote Sustainable Treasures, and act as a facilitator in bringing together organizations and individuals to share their knowledge.

"People are starting to get a better grasp of it. I can see we'll really have a significant change," said Crane. "They're saying, 'I need to do things a little bit different than I have been."

Crane refers to "entry-level change" as one way area residents can start making a sustainability difference.

"There are lots of simple things to do to reduce energy consumption that don't tear up your life to do it. Small places you can trim. Changes that don't hurt to do it," said Crane.

One simple suggestion is to not drive as often; possibly parking your car in a central location and walking a few blocks in either direction to complete errands.

"The choices we make about our houses, our communities...everyone will have to deal with that."

He points out that residents should consider the energy they use and where it comes from, giving thought to how much is really being spent for that energy in actual dollars and how much goes to taxes, delivery, etc.

GreenTown Joplin lauded Crane's quick response in sharing resources and contact information, referring to him as an energy efficiency genius, and noting that "the community is quite fortunate to have him as a resource."

Crane's business motto is "Improving Homes. Enhancing Lives" and it appears he has made it his life's mission to help residents make their homes less costly to own, healthier and more sustainable as part of a larger community.

"There are so many different approaches," said Crane. "We have to look at all the possibilities: location, lifestyle, maintenance and expectations. I see a nice mix of different generations showing interest in sustainability.

"The older generation is currently or will soon be on limited income. They're asking 'Can I afford to keep doing what I'm doing?' and then making a pragmatic push toward making a change and doing something different."

"This is our way of paying it forward."

--Hugh Shields



Photos by Tina Smith

## **Energy Efficiency** – Getting it Right

By Lori Marble

magine that you've reached the middle of winter and have yet to turn on your heat pump. Better yet, can you picture looking forward to the middle of an Ozark summer and triple-digit temperatures just to see how energy efficient your home remains?

Hugh and Ramona Shields, Joplin residents who recently built an energy-efficient home, are just such a couple.

Hugh built a passive solar home in rural Newton County approximately 25 years ago. He also built a house in the mid-80s with, as he describes, lots and lots of fiberglass insulation. He says he learned many lessons, including avoiding studs that went from inside to outside (thermal conduit); but even with all that hands-on education, yesterday's technology was nothing like what's available today.

Following the tornado and the destruction of the couple's 100 year-old Joplin bungalow, a relative shared information on home design and the couple were re-inspired to try some energy efficient approaches.

"We had a chance to make a change," said Hugh. "My wife was patient enough and we let the builder work through some floor plan and construction issues."

Their new home construction plan emphasized three areas: exceptional insulation in the walls and attic; south-facing glass thereby using a passive solar approach and incorporating thermal mass in the form of slab concrete flooring, a big safe room, and two inches of Styrofoam under the slab. The couple used structural insulated panels (SIPs) in their wall construction and panels of polyurethane foam between sheets of OSB strand boards, creating a six-inch thick section.

Fortunately, when contracting their builder, Goodwill Builders, who admitted he had an interest but not much experience in building energy-efficient homes, they were able to contract with Darrell Leggett, an energy consultant from Camdenton.

"Everything he (Leggett) told us was very practical, it all made good sense," said Hugh. "There are some exotic ideas out there and some naysayers out there. Darrell helped sort out the flyspecks from the pepper."

A retired mechanical engineer, Hugh takes satisfaction in proclaiming his belief that they "have the best insulated walls in town."

As with most of the Joplin energy-efficient rebuilding efforts, GreenTown Joplin provided the couple with information. GreenTown Joplin helps Joplin area residents build and save money on utility bills and live in healthier homes.

It's easy to consider the Shields energy-efficiency 'brand evangelists.""

"This is our way of paying it forward. We get a little missionary about it," said Hugh.

"You don't buy a car without looking at the mileage sticker," he continued. "I want to get to that place where people building or buying a house question what's the thermal mass, where's the south exposure, why would you not build with the best insulation?"

People have started to ask the couple questions about the build.

"Ramona is getting quite good at 'green' communication," joked Hugh. "I overheard her showing the house to a visiting couple and using the term 'thermal mass.' It was quite a thrill."

Their builder offered to furnish all their firewood this winter so he could track the usage and gauge the efficiency of the home's insulation. So far, they have used half a rick.

As of mid-January, they had yet to turn on their heat pump. The home's temperature had never gone lower than 68 degrees. They have their heat pump set to 66.

"I'm looking forward to next summer when we have triple-digit temperatures to see how well it works during air-conditioning season.

"Green construction has three ingredients: energy efficiency, sustainability and clean air inside. Sustainability is about being able to do this over and over again so that future generations can benefit the same," said Hugh. "For our part, we want our 10 grandkids to someday look back and say, 'they got it right.""